

Title (en)  
INDUSTRIAL ROBOT WITH MASS BALANCE

Title (de)  
INDUSTRIEROBOTER MIT MASSEN AUSGLEICH

Title (fr)  
ROBOT INDUSTRIEL AVEC EQUILIBRAGE DES MASSES

Publication  
**EP 0819041 B1 19981202 (DE)**

Application  
**EP 96909172 A 19960404**

Priority  
• DE 29506008 U 19950407  
• EP 9601478 W 19960404

Abstract (en)  
[origin: CA2217224A1] The invention concerns a multiple axis industrial robot (1) with a frame (2), an arm (7), an extension arm (13) and a robot hand (18), these elements being mounted so as to articulate with one another and drive-operated. The arm (7) is over-mounted on one side of the frame (18, 14) and situated to one side of the system plane (21). The arm (7) is connected to a static hydraulic mass balance (23) located on the same side of the system plane as the arm. The extension arm is likewise over-mounted on one side of the arm (7) and located with the arm bearing head (32) of the frame (2) within the system plane (21).

IPC 1-7  
**B25J 9/04**; **B25J 19/00**

IPC 8 full level  
**B25J 9/04** (2006.01); **B25J 19/00** (2006.01)

CPC (source: EP)  
**B25J 9/047** (2013.01); **B25J 19/0012** (2013.01)

Cited by  
DE102009043405B3; EP2832504A3; US9381644B2; WO2004020160A1; EP2301727A1; US10987817B2

Designated contracting state (EPC)  
CH DE FR GB IT LI SE

DOCDB simple family (publication)  
**DE 29506008 U1 19960814**; CA 2217224 A1 19961010; DE 59600917 D1 19990114; EP 0819041 A1 19980121; EP 0819041 B1 19981202; JP H11503076 A 19990323; WO 9631325 A1 19961010

DOCDB simple family (application)  
**DE 29506008 U 19950407**; CA 2217224 A 19960404; DE 59600917 T 19960404; EP 9601478 W 19960404; EP 96909172 A 19960404; JP 52999196 A 19960404